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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,952

07/25/2003

David R. Arnold

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07/18/2006

KEY SAFETY SYSTEMS, INC.
PATENT DEPARTMENT
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EXAMINER

ILAN, RUTH

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/626,952	ARNOLD, DAVID R.	
	Examiner	Art Unit	
	Ruth Ilan	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11, 13-19, 21-23 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-15 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 16-19, 21-23 and 26-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 16-20, 21-23 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 16-22 are method claims that depend from an apparatus claim and as such the apparatus limitations are considered to be part of the preamble. During examination, statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art. If so, the recitation serves to limit the claim. See, e.g., *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963.) The method of claim 16 does not manipulate any of the structure of claim 1, and as such claim 16 is in a sense broader. It is possible to infringe on claim 16 without infringing on claim 1, and as such claim 16 is an improper dependent claim. Even as amended, claim 16 recites no elements that relate to the elements already recited in claim 1. It is noted that "at least one single strand of wires" is not "said single strand of wires". Further regarding claim 19, the cable is dipped in the liquid material in claim 16, and as such claim 19 fails to further limit claim 16.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4, 6-9, 11, 16-20, 21-23 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 1, line 9 recites "the uncoated portion of the cable". There is insufficient antecedent basis for this limitation in the claims. Regarding claim 6, Claim 6 recites an alloy comprising molten: lead, tin, silver, bismuth, copper, antimony." which as grammatically constructed appears to require that the alloy including all of these elements. The Examiner suggests inserting "or" before antimony in the list. Further regarding claims 26, the use of the term capillary in this claim is unclear. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "capillary action" in claims 16, and 26 appears to be used by the claim to mean "spreads between the spaces in the wires, " at least based on the disclosure, and is used in the specification (see paragraph [0029] to describe coating the material and allowing it to be drawn between the wires. There is no disclosure of dimensions that indicate that capillary action is what is used to draw the liquid between the wires, it is likely that the liquid flows between the wires. The generally accepted meaning is "**Capillary action** or **capillarity** is the ability of a

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narrow tube to draw a liquid upwards against the force of gravity. It occurs when the adhesive intermolecular forces between the liquid and a solid are stronger than the cohesive intermolecular forces within the liquid. The effect causes a concave meniscus to form where the liquid is in contact with a vertical surface. The same effect is what causes porous materials to soak up liquids.” In the case of the instant application, the wire strand is immersed, and as such, the liquid probably flows into the spaces between the wires. Further regarding claim 26, the term “consists” implies that the solder is purely tin, which appears to inaccurately describe the invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. As best understood, Claims 16-19 and 21-23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Baihle (US 2,561,487.) Additionally, the Examiner notes that applicant has not traversed the examiner’s assertion of official notice that the method steps are old and well known as presented in the previous office action, and as such the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner’s assertion of official notice.

6. Claims 1, 3, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Wier ‘140 (US 5,897,140) Wier ‘140 teaches a seat belt system including a flexible

composite cable that extends between a pretensioner (12) and a buckle (18.) The cable includes at least one strand of wires (see Figure 2, and Figure 1, which shows a schematic for a twisted cable (16).) The cable is "saturated" (i.e. impregnated) with a plastic coating material 46, (see col. 4, lines 4-13) which inherently increases the stiffness of the cable. The curable coating material is considered to be solder, as broadly claimed. Regarding the process limitations in claim 1, "after being coated on the cable is configured to harden" and additionally in claim 4, "upon cooling". These limitations are process limitations which do not structurally distinguish over the prior art, as such they have not been given any patentable weight.

7. Claims 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Wier (US 6,095,615.) As shown in Figures 1 and 4, Weir teaches the claimed construction. It is the Examiners position that the metal tube of Weir is a "coating" and is a solder, since it is light metal.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wier (US 5,897,140) in view of Riggs (US 3,318,082) and Wier (US 6,095,615.) Wier teaches in col. 4, lines 4-13 that the cable is saturated, and as such will inherently include some degree of intra-wire filling. Wier does not however specifically disclose the fill material being between the intra-wire spaces. Riggs teaches that it is useful with a twisted cable to impregnate the cable with plastic to the extent that the intra-wire and

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intra-strand spaces are filled. This level of impregnation minimizes between wire abrasion, and increases the life of the cable (see col. 1, lines 21-24.) It would have been obvious to one having ordinary skill in the art at the time of the invention to impregnate the cable of Wier to the extent taught by Riggs, in order to avoid between wire abrasion, and to increase the life of the cable. Regarding claim 26, Weir is silent regarding the pliability of the resin in the claimed range, and additionally does not teach tin. It is noted that that Applicant has not disclosed any particular material that is pliable within the claimed range. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. It would have been obvious to one having ordinary skill in the art at the time of the invention to select a fill material of tin with pliability within the claimed range, since such a temperature range is the environment expected in an automobile.

Allowable Subject Matter

10. Claims 2, 7-9, 11, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claims 13-15 are allowed.

Response to Arguments

12. Applicant's arguments have been fully considered but with respect to the method claims they are not persuasive. Please note the rejection above. In particular, the method steps do not materially manipulate any of the structure of claim 1.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 571-272-6673. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

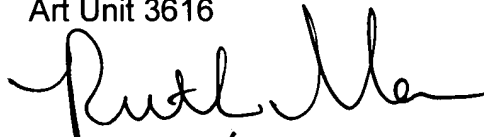
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RI
7/12/06

Ruth Ilan
Primary Examiner
Art Unit 3616


7/12/06